

C L A I M S

1. A horizontal milling-boring machine comprising a horizontal bed (6) anchored to the floor (8), a column structure (4) supported by the bed and slidable therealong, a slide carriage (22) slidable vertically along said column structure (4), and a slide (2) supporting the tool head (34) and movable axially to said carriage (22) in a direction perpendicular to the axis of said bed (6), characterised in that:
- said bed (6) is monolithic and is separated from the work table (10),
 - said column structure (4) is formed as a portal, with two columns (16) connected together by an upper crosspiece (18) and provided lowerly, for their support on the bed, with portions (19) lying external to the opening of said portal, which is delimited laterally by said columns (16) and extends lowerly into proximity with said bed (6),
 - said slide carriage (22) is slidable along the facing internal walls of said columns (16),
 - guide means (26) and drive means (28, 30, 32) being interposed between said column structure (4) and said bed (6).
2. A milling-boring machine as claimed in claim 1, characterised in that the guide means (26) consist of rails positioned on the upper surface of said bed (6).
3. A milling-boring machine as claimed in claim 1, characterised in that the guide means (26) consist of rails positioned on the lateral surfaces of said bed (6).

4. A milling-boring machine as claimed in claim 1, characterised in that the drive means consist of at least one screw and at least one threaded bush which mutually engage.
5. A milling-boring machine as claimed in claim 4, characterised in that
5 the drive means consist of a rack (32) rigid with said bed (6) and at least one pinion (30) rigid with said column structure (4).
6. A milling-boring machine as claimed in claim 4, characterised in that the drive means consist of a linear electric motor.
7. A milling-boring machine as claimed in one or more of claims from 4 to
10 6, characterised in that the drive means (28, 30, 32) are positioned on the upper surface of said bed (6).
8. A milling-boring machine as claimed in one or more of claims from 4 to 6, characterised in that the drive means (30, 32) are positioned on at least one lateral surface of said bed (6).
- 15 9. A milling-boring machine as claimed in claim 1, characterised in that the two columns (16) of the portal column structure (4) are connected together lowerly by a pair of lower crosspieces (30) which laterally embrace said bed (6).
10. A milling-boring machine as claimed in claims 8 and 9, characterised in
20 that the guide rails (26) are interposed between the outer lateral surfaces of said bed (6) and the inner lateral surfaces of said lower crosspieces (20).
11. A milling-boring machine as claimed in claim 1, characterised in that each column (16) of the portal column structure (4) has a width substantially equal to the width of the bed (6) along which the column structure slides.

12. A milling-boring machine as claimed in claim 11, characterised in that each column (16) of the column structure (4) is provided lowerly with a portion (19) projecting towards the outside of the column structure and contained within the transverse outline thereof.

5 13. A milling-boring machine as claimed in claim 1, characterised in that the bed (6) comprises a longitudinal recess (36) within which corresponding lower appendices (40) of each column (16) are slidably housed.

14. A milling-boring machine as claimed in claim 13, characterised in that
10 the two lower appendices (40) of each column (16) extend into a portion which connects them together and slides with them along the longitudinal recess (36) of the bed (6).

15 15. A milling-boring machine as claimed in claim 13, characterised in that the guide rails (26) are interposed between the internal lateral surfaces of said recess (36) and the facing external lateral surfaces of said appendices (40).